

ORAU Continues WFO Science Education and Research Participation Programs

During 2012, the Oak Ridge Institute for Science and Education (ORISE) continued its management of several science education and research participation programs for various federal agencies.



Post-doctoral fellow Ilana Goldberg

Post-doctoral fellow Ilana Goldberg, in the U. S. Department of Homeland Security (DHS) Transportation Security Laboratory Visiting Scientist Program, puts a homemade explosive mixture into the differential scanning calorimeter. This instrument measures and controls heat flow in to and out of the sample. Goldberg's goal is to better understand the thermal properties of these explosive mixtures to aid in stability predictions. The two-year program is an initiative managed by ORISE for DHS to enhance the quantity, quality, and diversity of the future DHS scientific and engineering workforce.

In early 2012, the Oak Ridge Associated Universities (ORAU) successfully submitted annual electronic occupational exposure data for the Duke Energy nuclear power plants to the Information System on Occupational Exposure (ISOE) database through an ORAU-developed software application. Results of this pilot project were presented at the ISOE Working Group on Data Analysis (WGDA) meeting in Paris, France. The WGDA directed that the Nuclear Energy Agency (NEA) integrate this application into their system to prepare for official submittals. The WGDA also asked ORAU to submit a proposal for rolling out the application to all current users and for expanding electronic reporting to all U.S. and international utilities. The WGDA also requested that



ORAU perform a data quality assessment on the ISOE database. The Nuclear Regulatory Commission (NRC) will direct the scope and resources to conduct this assessment.



ORAU produced training materials and modules, and conducted a new epidemiology training course titled "Understanding Radiation Health Risk Studies and How to Communicate Them" at NRC headquarters. ORAU plans to work with the NRC to establish EPI training for all NRC Regions, as scheduling permits.

The ORISE Radiochemistry Laboratory analyzed more than 3,800 samples for the U.S. Department of Energy and NRC and also participated in an

Environmental Protection Agency, Environmental Response Laboratory Network study focused on streamlining data delivery in the event of a radiological incident.

ORISE also celebrated the launch of a new online message development tool called MessageWorks. Developed for the Centers for Disease Control and Prevention's Division of Cancer Prevention and Control, MessageWorks helps health communication professionals craft new health messages, assess existing messages, and match messages to the most appropriate audience segments. The tool will save communications staff hundreds of thousands of dollars by reducing the number of focus groups and other assessments required to develop effective health messages.



CDC **MessageWorks**
CRAFTING & DEFENDING EFFECTIVE MESSAGES